

PATENT

Atty. Dkt. No. NVDA/P000723

IN THE CLAIMS:

1. (Currently Amended) A system for cooling a processor, the system comprising:
the processor;
a heat sink assembly having a fan, a plurality of fins, and a bottom surface,
wherein the plurality of fins and at least a portion of the bottom surface define air
channels, and the heat sink assembly is disposed onto the processor; and
a heat sink lid coupled to the heat sink assembly, wherein:
the heat sink lid only covers a portion of the air channels proximate the
fan,
the heat sink assembly is configured such that air flows directly from the
fan along the bottom surface of the heat sink assembly, and
the length [[of]] of at least one fin of the plurality of fins is equal to or
greater than the length of the processor.
2. (Original) The system of claim 1, further comprising a thermal adhesive disposed
on an outer surface of the heat sink assembly for thermally coupling the heat sink
assembly to the processor.
3. (Previously Presented) The system of claim 1, wherein the uncovered portion of
the air channel reduces air flow noise in the system during operation.
4. (Previously Presented) The system of claim 3, wherein the uncovered portion of
the air channel reduces air flow noise by preventing the formation of a standing wave
within the air channel during operation.
5. (Previously Presented) The system of claim 4, wherein the uncovered portion of
the air channel prevents the formation of the standing wave by preventing the reflection
of an incident wave propagating within the air channel during operation.

PATENT

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6. (Original) The system of claim 1, wherein the heat sink lid includes an edge configured to reduce turbulent flow of air escaping from the air channel and flowing across the edge.

7. (Original) The system of claim 6, wherein the edge is substantially perpendicular to a direction of air flow within the air channel.

8. (Original) The system of claim 1, wherein the processor comprises a graphics processing unit.

9. (Original) The system of claim 1, wherein the processor comprises a central processing unit.

10. (Original) The system of claim 1, wherein the processor comprises an application-specific integrated circuit.

11-16. (Canceled)

17. (Currently Amended) The system of claim 1, wherein the heat sink assembly further has a wall and the heat sink lid is directly coupled to the wall.

18. (Previously Presented) The system of claim 1, wherein the bottom surface is substantially flat.

19-21. (Canceled)